

IN REPLYING, ADDRESS THE

FEDERAL SECURITY AGENCY PUBLIC HEALTH SERVICE

January 29, 1952

Communicable Disease Center Enteric Eactoriology Laboratories P. O. Box 185 Chamblee, Georgia

> Dr. Joshua Lederberg The University of Wisconsin Dept. of Genetics Madison 6, Wisconsin

Dear Dr. Lederberg:

It goes without saying that I appreciate your courtesy in sending the manuscript of the paper which you and Mr. Zinder have written. Also, I need not say that I have enjoyed reading the paper. I must admit that some of the genetic terminology used in the paper threw me for a loss. As far as the serologic work is concerned, I have little comment. Probably that is because I understand that part of the work much better than any other. It is adequately reported and perfectly clear. The only question which arises in my mind is, how often can the results obtained be reproduced? You succeeded in transforming the flagellar antigens of S. typhi to those of S. typhimurium in one tube in the experiment which you cited. Is this result readily reproducible or were you able to obtain this transformation only one time? You will understand that I am not quarreling with this experiment. I have seen the results of it and I am perfectly satisfied. However, I think it would be of great interest to the average reader to know whether you can transform the flagellar antigens regularly or whether it is more or less of an accident. You might care to elucidate on this.

I am sure you will realize that I am not qualified to criticize the experiments in which changes in fermentative characters are discussed. I have done little work of this sort and am not sufficiently familiar with it to criticize it intelligently. I am sure you feel quite sure of the results you have obtained else you would not publish them. The only note of caution I would sound would be that I would not regard variants of S. typhimurium which ferment such sugars as galactose, xylose, or maltose as anything exceptional. The average culture of S. typhimurium ferments these substances quite readily and I would expect the appearance of variants which fermented them without any special treatment of the parent culture. You can take this remark for what it is worth. It may be worth nothing.

I thought it extremely interesting that the system of variation in Salmonella apparently did not coincide with the three combinations encountered in E. coli. Naturally, I am much interested in the work

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you are doing and shall look forward with pleasure to receiving a reprint of the paper when it is published. I know that Dr. Peso would greatly appreciate having a microfilm copy of the manuscript. As far as our laboratory is concerned it would be of little help to us since we do not have a microfilm reader available. The CDC library is situated some twelve miles from the laboratory and we would necessarily have to go in to the city in order to use the film. Nevertheless, we appreciate your thoughtfulness in offering a copy of the manuscript.

Again thanking you for sending the manuscript and with best wishes, I am

Sincerely yours,

PRE:mg

Philip R. Edwards, Ph. D. Bacteriologist-in-Charge Enteric Bacteriology Unit

P.R. Eaward

Encl.